(PEGARAL ASSAGLA REPARTMENT) EXECUTAL

skidheren (is

grania na sarangana na mangana.

in and a

HEOMERIC BROKENIES

dirii maid alakining bania gariahii

illi sir. Prid

linterior sector general

GENERAL ASSEMBLY RETIREMENT SYSTEM BOARD OF TRUSTEES

OFFICERS

PHILIP J. ROCK, Chairman

GENE L. HOFFMAN, Vice Chairman

JOHN MERLO, Secretary

MEMBERS

Senators -

JOHN A. D'ARCO, Chicago

PHILIP J. ROCK, Oak Park

CALVIN W. SCHUNEMAN, Prophetstown

Representatives -

GENE L. HOFFMAN, Elmhurst

ROBERT M. TERZICH, Chicago

SAM W. WOLF, Granite City

Annuitant Member -

JOHN MERLO, Chicago

* * * * * * *

Norman E. Lentz, Administrative Secretary

Sandor Goldstein, Consulting Actuary

CONTENTS

		Page
LETTER OF	TRANSMITTAL	
REPORT OF	THE TRUSTEES	1
AUDITORS'	REPORT	7
REPORT OF	THE ACTUARY	20
APPENDIX:		
Summary o	of Provisions of the System	32
Retiremen	t Estimate Chart	34
Table 1.	Active Participants Classified by Age and Total Annual Salaries	40
Table 2.	Active Participants Classified by Length of Service and Total Annual Salaries	41
Table 3.	Inactive Participants Classified	41
Table 3.	By Age and Total Annual Salaries	42
Table 4.	Inactive Participants Classified by Length of Service and Total Annual Salaries	43
Table 5.	Retirement Annuitants Classified by Age and Total Annual Annuities	44
Table 6.	Survivor Annuitants Classified by Age and Total Annual Annuities	45

STATE OF ILLINOIS

GENERAL ASSEMBLY RETIREMENT SYSTEM

NORMAN E. LENTZ ADMINISTRATIVE SECRETARY

415 ILES PARK PLACE SPRINGFIELD, ILLINOIS 62718 TELEPHONE (217) 782-8500

March 23, 1988

The Honorable James R. Thompson Governor of the State of Illinois Springfield, Illinois

Dear Governor Thompson:

On behalf of the Board of Trustees of the General Assembly Retirement System of Illinois, I take pleasure in presenting its FORTIETH ANNUAL REPORT covering the operations of the System for the fiscal year ended June 30, 1987.

Respectfuly submitted,

FORTIETH ANNUAL REPORT OF THE BOARD OF TRUSTEES For the Fiscal Year Ended June 30, 1987

Presented herewith is the Fortieth Annual Report of the Board of Trustees of the General Assembly Retirement System of Illinois for the fiscal year ended June 30, 1987. This report discusses the results of operations of the System for the year and includes a report by the Actuary on the results of an actuarial valuation as of the aforesaid date.

Membership Statistics

		<u>cipants</u>	Retired	Survivor	m - 4 1 -
	<u>Active</u>	<u>Inactive</u>	Members	<u>Annuitants</u>	<u>Totals</u>
Number at July 1, 1986	192	81	199	120	592
Additions	<u> 26</u>	<u>14</u>	_17	_6	<u>63</u>
	218	95	216	126	655
Deductions	30	_8	_10	3	_51
Number at June 30, 1987	188	<u>87</u>	<u>206</u>	<u>123</u>	<u>604</u>

Inactive participants represent 87 former members of the General Assembly who elected to maintain their accumulated pension credits in the System in order to activate these credits at a later date in the form of annuities upon their attainment of the prescribed ages of retirement.

FINANCIAL AND STATISTICAL FACTS

June 30, 1987

At Year End	June 30, 1987
Net Present Assets	\$29,152,605
Investments (at cost)	\$28,649,631
Average yield on investments (at cost)	5.9%
Active Participants	188
Retirement Annuitants	206
Survivors' Annuitants	123
Unfunded Accrued Liability	\$31,482,720
Rate of Funding (Security Ratio)	51.4
For the Year	
Net Revenues	\$2,413,629
Net Investment Income and Interest on Cash Balance	\$1,661,614
Net Realized Gain (Loss) on Sale of Investments	\$1,402,272
Participants' Contributions	\$768,478
State Contributions	\$2,214,100
Retirement Annuity Payments	\$2,913,799
Annuities to Survivors	\$547,413
administrative Expense	\$91,421
Retirements during the year	17
Deaths among retired members	10

Retirements. Members on retirement at the close of the year numbered 206 receiving annual pension payments totaling \$3,060,946. The following statistics cover these pension recipients:

1.	Average annual annuity	\$14,590
2.	Average age at retirement	61.0
3.	Average length of service	14.3
4.	Average annual salary at retirement	\$24,112
5.	Average age at June 30, 1987	69.3
6.	Proportion of married annuitants	87.9
7.	Average annual annuity to an eligible spouse	\$10,139

Survivors' annuities. There were 123 survivors of deceased members in receipt of annuity payments totaling \$562,182 per year. This compares with 120 recipients of these annuities at the end of the preceding fiscal year. The average age of these beneficiaries at June 30, 1987 was 73.7 years. Their average age at the beginning dates of their annuities was 63.0 years.

In addition there were 3 reversionary annuities in force at June 30, 1987 receiving a total of \$16,644 per year. Their average age was 69.7 years.

<u>Financial review</u>. The accumulated reserves at the close of the year amounted to \$29,152,605. The increase in these reserves for the year was \$2,413,629. The accumulated contribution credits of the members were equal to 19.1% of the total reserves.

Total revenues for the 1987 fiscal year amounted to \$6,046,464 from the following sources:

Contributions and interest paid by participants.	•	\$ 768,478
Employer contributions by State	•	2,214,100
Income from Investments		1,661,614
Net realized gain on the sale of investments	•	1,402,272
Total revenues for the year		\$6,046,464

Total expenditures for the year amounted to \$3,632,835 for the following purposes:

Retirement annuities						\$2,913,799
Survivors' annuities				•		547,413
Refunds of member contributions				•	•	80,202
Administrative expenses	•	• . •	•	•	•	91,421
Total expenditures for the year		_		_	_	\$3.632.835

Excess of total revenues over total expenditures \$2,413,629

Net revenues for the year of \$2,413,629 compare with \$3,488,105 in the preceding fiscal year or a decrease of \$1,074,476.

Investments. The investment of the net reserves of the System is under the management of the "Illinois State Board of Investment." That agency also manages the investments of the Judges Retirement System and the State Employees' Retirement System of Illinois. Under Article 22A of the Illinois Pension Code governing the Illinois State Board of Investment, the Chairman of the Board of Trustees of each participating retirement system is, ex officion a member of the State Investment Board.

The assets of the General Assembly Retirement System are part of the Commingled Fund managed by the Illinois State Board of Investment

which had a market value of \$2.597 billion as of June 30, 1987. The assets of the General Assembly Retirement System were approximately 1.2% of the Commingled Fund and were diversified in the following manner:

	Cost	<u>Market</u>
U.S. Government & Agency Obligations	\$ 6,554,510	\$ 6,412,725
Foreign Obligations	274,070	308,349
Corporate Obligations	4,837,280	5,088,829
Convertible Bonds	359,261	355,514
Common Stock & Equity Fund	10,898,328	12,889,477
Convertible Preferred Stock	244,219	271,157
Preferred Stock	60,128	69,621
Real Estate Pooled Funds	1,693,920	2,109,972
Venture Capital	299,364	331,133
Money Market Instruments	3,198,012	3,193,393
Other Assets, less liabilities	230,539	230,206
	\$28,649,631	\$31,260,376

The Commingled Fund produced a total rate of return (Capital appreciation plus income) of 8.8% for the fiscal year 1987.

Funding. The law governing the System requires that the Board of Trustees submit to the Governor, prior to each regular session of the General Assembly, the appropriation requirements of the System for the ensuing fiscal year. The appropriation by the State is to be in an amount which, when added to the current members' contributions and the amount of income accruing from other sources, will result in the accumulation of reserves to meet the actuarial or accrual funding of financial requirements of the System.

For the year 1987-1988 the Board of Trustees received an appropriation of \$1,918,900 from the General Revenue Fund of the State of Illinois for that year. Based on the findings and recommendations of the Actuary of the System, an amount of \$3,386,700 has been requested for the 1988-1989 fiscal year. This has been based on an actuarial funding requirement of normal cost plus interest on the unfunded liability.

Concluding Comment. During 1987 the Actuary of the System was changed with Sandor Goldstein replacing A. A. Weinberg. Several changes were made by the new Actuary as follows:

- The "projected unit credit cost" method replaced the "entry age normal" cost method;
- 2. The assumed rate of return on investments was increased to 7.5% from 6% used the previous years; and
- 3. The assumption in salary increases was revised from 5% to 6%.

Through these changes in the new actuarial method applied and revised assumptions, the Actuary determined that the security ratio at June 30, 1987 was 51.4%.

It is the policy of the Board and the efforts of the administrative staff to provide a full measure of service to the participating members and benefit recipients of the System.

Respectfully submitted,

Philip J. Rock Chairman

ARTHUR ANDERSEN & Co. Chicago, Illinois

Honorable Robert G. Cronson Auditor General State of Illinois

We have examined the balance sheet of the GENERAL ASSEMBLY RETIREMENT SYSTEM--STATE OF ILLINOIS as of June 30, 1987, and the related statements of revenues, expenses and changes in fund balance, and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards and the standards for financial audits contained in the U. S. General Accounting Office's Standards for Audits of Governmental Organizations, Programs, Activities and Functions and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

An actuarial study performed by the new actuary employed by the General Assembly Retirement System during fiscal year 1987 resulted in a significant reduction in accrued benefit costs as of June 30, 1987, due to changes in certain actuarial assumptions and other material but not identified reasons. Generally accepted accounting principles require disclosure of the effects, if significant, of certain factors affecting the year-to-year change in accrued benefit cost information. As explained in Note 2 to the

financial statements the General Assembly Retirement System has not identified or disclosed all significant factors affecting the change in accrued benefit cost.

In our opinion, except for the omission of information as discussed in the preceding paragraph, the financial statements referred to above present fairly the financial position of the General Assembly Retirement System--State of Illinois as of June 30, 1987, and the results of its operations and the changes in its financial position for the year then ended, in conformity with generally accepted accounting principles which, except for the change, with which we concur, in the method used to compute the accrued benefit cost as described in Note 2 to the financial statements, applied on a basis consistent with that of the preceding year.

Our examination was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The Supplementary Schedules 1 and 2 are presented for purposes of additional analysis and are not a required part of the basic financial statements. This information has been subjected to the auditing procedures applied in our examination of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

ARTHUR ANDERSEN & CO.

October 9, 1987

GENERAL ASSEMBLY RETIREMENT SYSTEM--

STATE OF ILLINOIS

BALANCE SHEET

JUNE 30, 1987

A S S E T S

Cash	\$	534,782
Receivables- Participants' contributions Refundable annuities Interest on investments	\$	880 1,647 1,261
	\$	3,788
Investments held in the Illinois State Board of Investment Commingled Fundat cost (market value: \$31,260,376)	\$ 28	,649,631
		,188,201
LIABILITIES AND FUND BALANCE		
Liabilities- Annuities and refunds payable Accounts payable Due to Judges Retirement System of Illinois	\$	15,284 487 19,825
	\$	35,596
Fund balance- Actuarially determined accrued benefit cost Less- Unfunded accrued benefit cost	\$ 60	,635,325
representing an obligation of the State of Illinois	(31	,482,720)
Fund balancefunded statutory reserves	\$29	,152,605
		,188,201 ======

The accompanying notes to financial statements are an integral part of this statement.

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCE FOR THE YEAR ENDED JUNE 30, 1987

Revenues- Contributions-	
Participants State of Illinois Transfers from other systems	\$ 767,483 2,214,100 213
	\$ 2,981,796
Net investment income Interest earned on cash balances Interest received from participants Net realized gain on sale of investments	1,582,462 79,152 782 1,402,272
	\$ 6,046,464
Expenses- Benefits-	
Retirement annuities Survivors' annuities Automatic annuity increase	\$ 2,597,704 547,413 316,095
	\$ 3,461,212
Refunds Administrative	80,202 91,421
	\$ 3,632,835
Excess of revenues over expenses	\$ 2,413,629
Fund balance at beginning of year	26,738,976
Fund balance at end of year	\$29,152,605

The accompanying notes to financial statements are an integral part of this statement.

STATEMENT OF CHANGES IN FINANCIAL POSITION FOR THE YEAR ENDED JUNE 30, 1987

Sources of working capital- Working capital provided by operations excess of revenues over expenses Transfers from ISBI	\$2,413,629 550,002
Use of working capitalreinvested earnings	(2,984,734)
Net decrease in working capital	\$ (21,103)
Elements of net increase (decrease) in working capital- Cash Receivables Annuities and refunds payable	\$ 22,986 (30,464) (14,165) 1,314
Accounts payable Due to Judges Retirement System of Illinois	(774)
Net decrease in working capital	\$ (21,103)

The accompanying notes to financial statements are an integral part of this statement.

NOTES TO FINANCIAL STATEMENTS

JUNE 30, 1987

(1) DESCRIPTION OF SYSTEM:

General-

The General Assembly Retirement System-State of Illinois (General Assembly Retirement System) was established in 1947 as a component unit of the State of Illinois and is governed by Chapter 108-1/2, Article 2 of the Illinois Revised Statutes. The General Assembly Retirement System covers members of the General Assembly of the State and persons elected to the offices of Governor, Lieutenant Governor, Secretary of State, Treasurer, Comptroller and Attorney General for the period of service in such offices and the Clerks and Assistant Clerks of the respective Houses of the General Assembly. Participation by eligible persons is optional.

Pension Benefits-

After eight years of credited service, participants have vested rights to retirement benefits beginning at age 55, or after four years of service with retirement benefits beginning at age 62. The General Assembly Retirement System also provides annual automatic annuity increases after retirement, survivors' annuity benefits, reversionary annuity benefits and, under specified conditions, lump-sum death benefits. Participants who terminate service may receive, upon application, a refund of their total contributions.

Funding-

The General Assembly Retirement System is funded through contributions from participants, State of Illinois appropriations and investment income. Participants in the General Assembly Retirement System contribute 8-1/2% of their salaries for retirement annuities, 2% for survivors' annuities and 1% for an annual automatic increase in the retirement annuity.

(2) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

Basis of Accounting-

The accounting records of the General Assembly Retirement System are maintained on the accrual basis.

Investments-

Investments of the General Assembly Retirement System are managed by the Illinois State Board of Investment (ISBI) pursuant to Article 22A of the Illinois Pension Code and are held in the Commingled Fund of the ISBI. Investments of the General Assembly Retirement System are reported at the cost of its units of participation in the Commingled Fund of the ISBI.

Units of the Commingled Fund of the ISBI are issued to the member systems on the last day of the month based on the unit net asset value calculated as of that date. Net investment income of the Commingled Fund of the ISBI is allocated to each of the member systems on the last day of the month on the basis of percentage of accumulated units owned by the respective systems. Management expenses are deducted monthly from income before distribution. Investment income is recognized when earned.

The investment authority of the ISBI is provided in Illinois Revised Statutes Chapter 108-1/2 Article 22A-112. The ISBI investment authority includes investments in obligations of the U.S. Treasury and other agencies, notes secured by mortgages which are insured by the Federal Housing Commission, real estate, common and preferred stocks, convertible debt securities, deposits or certificates of deposit of Federally insured institutions and options. Such investment authority requires that all opportunities be undertaken with care, skill, prudence and diligence given prevailing circumstances that a prudent person acting in like capacity and experience would undertake.

Governmental Accounting Standards Board (GASB)
Statement No. 3, entitled "Deposits with Financial Institutions,
Investments (including Repurchase Agreements) and Reverse
Repurchase Agreements," requires certain financial statement
disclosure of deposits and investments, such as the disclosure of
carrying amounts by type of investment and classification into
one of three categories based upon credit risk. Investments in
pools managed by other governmental agencies, in general, are to
be disclosed but not categorized because they are not evidenced
by securities that exist in physical or book entry form.

The General Assembly Retirement System transfers money to the ISBI for investment in the Commingled Fund of the ISBI. This money is then allocated among various investment managers to pursue a specific investment strategy. All investment transactions are initiated by the investment managers (either internal

or external). The transaction settlement information is then forwarded to the agent bank's trust department under a master custodial agreement.

Custody of a majority of the actual physical securities is maintained at an agent of the agent bank's trust department using a book-entry system.

The investments managed by the Commingled Fund of the ISBI are reported in the appropriate credit risk category in the annual financial report of the Illinois State Board of Investment. Reference should be made to the 1987 annual financial report of the ISBI for additional information relating to the investments of the ISBI. The General Assembly Retirement System owns 1.2% of the ISBI Commingled Fund as of June 30, 1987.

Accrued Benefit Cost-

The accrued benefit cost amounts as of June 30, 1987 and 1986, were \$60,635,325 and \$66,450,661, respectively. The calculations of the accrued benefit cost are made by consulting actuaries as of the end of each fiscal year. The significant assumptions underlying the actuarial computations for the calculations performed as of June 30, 1987 and 1986, are as follows:

	1987	1986
Actuarial method	Projected unit credit cost	Entry age normal
Rate of return on investments	7.5%	6 %
Rate of turnover	A moderate scale consistent with the System's experience	•
Mortality basis	UP-1984 Mortality Table	1971 Group Annuity Mortality Table (adjusted by the actuary to provide a margin for mortality increase)
Salary increase	6%	5 %
Assumed average age at retirement	62 years	63 years

As shown in the table above, certain actuarial assumptions and the actuarial method were changed in 1987 based on an experience analysis performed by the General Assembly Retirement System's actuary. Together, the changes reduced the accrued benefit cost by \$10,840,898. The change in the assumed rate of return on investments from 6% to 7-1/2% together with the change in the assumed rate of annual salary increases from 5% to 6% reduced the accrued benefit cost by \$9,680,419. The change in actuarial method from entry age normal method to the alternatively acceptable projected unit credit method reduced the accrued benefit cost by \$1,160,479.

The offsetting increase of \$5,025,562 in accrued benefit cost is attributable to a number of factors which have not been identified by the General Assembly Retirement System.

The General Assembly Retirement System and its actuary believe that the new method and assumptions are preferable taking into consideration the System's funding and payout experience.

Fund Balance-

The funded statutory reserves of the General Assembly Retirement System are composed of three components as follows:

- (a) Reserve for Participants Refundable Contributions-This reserve consists of active participants' accumulated refundable contributions less refunds paid.
- (b) Reserve for Automatic Annuity Increase--This reserve represents participants' accumulated contributions for the automatic annuity increase, plus an equal amount contributed by the State of Illinois, plus 4% interest credited on the beginning balance, less automatic annuity increase benefits and refunds paid.
- (c) Reserve for Future Operations--This reserve is the balance remaining in the General Assembly Retirement System from State of Illinois contributions and revenue from investments after consideration of charges for payouts by the General Assembly Retirement System.

Administrative Expenses-

Administrative expenses common to the General Assembly Retirement System and the Judges Retirement System are borne 40% by the General Assembly Retirement System and 60% by the Judges Retirement System. Invoice vouchers covering common expenses incurred are paid by the Judges Retirement System, and 40% thereof is allocated to and reimbursed by the General Assembly Retirement System. Administrative expenses allocated to and reimbursed by the General Assembly Retirement System were \$80,129 for the year ended June 30, 1987.

GENERAL ASSEMBLY RETIREMENT SYSTEM --

STATE OF ILLINOIS

STATEMENT OF CHANGES IN FUNDED STATUTORY RESERVES

FOR THE YEAR ENDED JUNE 30, 1987

	Total Funded Reserves	Reserve for Participants' Contributions for Retirement and Survivors' Annuities	Reserve for Automatic Annuity Increase	Reserve for Future Operations
Balance at June 30, 1986	\$26,738,976	\$5,373,363	\$1,009,112	\$1,009,112 \$20,356,501
Add (deduct)- Excess (deficiency) of revenues over expenses	2,413,629	627,739	(189,676	(189,676) 1,975,566
<pre>Aeserve transfers- Accumulated contributions of members who retired during the year</pre>		(446,085)	,	146,085
Reserve for automatic annuity increase credited with interest at 4% on the reserve balance at beginning of year	•		40,364	(40,364)
Balance at June 30, 1987	\$ 29,152,605	\$5,555,017	\$ 859,800	\$ 22,737,788

SCHEDULE OF ADMINISTRATIVE EXPENSES FOR THE YEAR ENDED JUNE 30, 1987

Personal services and related payroll costs Contractual services-	\$69,835
Rentals-	_
Office equipment	938
Real property	6,499
Professional and technical services	9,400
Other	2,027
Travel	757
Commodities	1,055
Telecommunications	910
Total	\$ 91 , 421

REPORT OF THE ACTUARY

June 30, 1987



180 North LaSalle Street Suite 700 Chicago, Illinois 60601 (312) 726-5877

December 4, 1987

Board of Trustees General Assembly Retirement System of Illinois 415 Iles Park Place Springfield, Illinois 62718

Re: Actuarial Valuation As Of June 30, 1987

I am pleased to submit my actuarial report on the financial position and funding requirements of the General Assembly Retirement System of Illinois based on the actuarial valuation as of June 30, 1987.

The report consists of 10 as follows:

Section A - Purpose And Summary Section B - Data Used For Valuation Section C - Retirement System Provisions - Actuarial Assumptions and Cost Method Section D Section E - Actuarial Liability Section F - Employer's Normal Cost - Employer's Funding Requirement For FY 88 Section G Section H - State Appropriation Requirements For FY 89 - Present Value of Credited Projected Benefits Section I Section J - Certification

I would be pleased to discuss any aspects of this report with you at your convenience.

Respectfully submitted,

Jawel Gellettin

Sandor Goldstein

Fellow of the Society of Actuaries

Enrolled Actuary No. 3402

A. PURPOSE AND SUMMARY

We have carried out an actuarial valuation of the General Assembly Retirement System of Illinois as of June 30, 1987. The purpose of the valuation was to determine the financial position and funding requirements of the retirement system. This report is intended to present the results of the valuation. The results of the valuation are summarized below:

1.	Total actuarial liability	\$ 60,635,325
2.	Actuarial value of assets	31,174,446
3.	Unfunded actuarial liability	29,460,879
4.	Funded Ratio	51.4%
5.	Employer FY 88 funding requirement of normal cost	
	plus interest on the unfunded liability	\$ 3,273,090
6.	Employer FY 88 funding requirement of normal cost	
	plus amount required to pay off unfunded liability	
	over 40 years as a level percent of payroll	2,395,818
7.		1,970,000
8.	Employer FY 89 funding requirement of normal cost	
	plus interest on the unfunded liability	3,386,687
9.	· ·	, ,
	plus amount required to pay off unfunded liability	
	over 40 years as a level percent of payroll	2,483,852
	over 40 years as a zever percent or payrorr	_,
10.	Actuarial present value of credited projected	
	benefits	\$ 60,635,325

B. DATA USED FOR THE VALUATION

Participant Data. The participant data required to carry out the valuation was supplied by the retirement system. The membership of the system as of June 30, 1987 on which the valuation was based is summarized in Exhibit 1. It can be seen that there were 188 active members, 206 members receiving retirement annuities, and 123 members receiving surviving spouse's annuities included in the valuation. The total active payroll as of June 30, 1987 was \$6,643,710.

Exhibit 1

Summary of Membership Data

1. Number of Members.	
(a) Active Members	188
(b) Members Receiving	
(i) Retirement Annuities	206
(ii) Surviving Spouse's Annuties	123
(c) Inactive Members	86
2. Annual Salaries	
(a) Total salary	\$ 6,643,710
(b) Average Salary	35,339
3. Total accumulated employee contributions	\$ 4,770,095
4. Annual Annuity Payments	
(a) Retirement Annuities	\$ 3,060,946
(b) Surviving Spouse's Annuities	562,182

Assets. The asset values used for the valuation were based on the asset information contained in the unaudited statement of assets as of June 30, 1987 prepared by the system. For purposes of the valuation, the book value of the assets of the system less the amount of current liabilities was increased by the average excess of the market value of assets over the book value of assets of the system as of the last three year ends. The resulting actuarial value of assets was \$31,174,446. The development of this value is outlined in Exhibit 2.

For the June 30, 1986 actuarial valuation, the book value of the assets of the system was used for the actuarial value of assets. The change in the method of determining the actuarial value of assets increased the actuarial value of assets as of June 30, 1987 by \$2,021,841.

Exhibit 2

Actuarial Value of Assets

1.	Total book value of assets	\$ 29,188,201
2.	Current liabilities	35,596
3.	Net assets at book value (1-2)	\$ 29,152,605
4.	Average excess of market value of assets	
	over book value of assets over the last	
	three years	2,021,841
5.	Actuarial value of assets	\$ 31,174,446

C. RETIREMENT SYSTEM PROVISIONS

The actuarial valuation was based on the provisions of the retirement system in effect as of June 30, 1987 as provided in Article 2 of the Illinois Pension Code.

D. ACTUARIAL ASSUMPTIONS AND COST METHOD

Actuarial Assumptions

The actuarial assumptions used for the June 30, 1987 valuation were based on an experience analysis of the retirement system for the period 1984 through 1987. The major actuarial assumptions used for the valuation are summarized below:

Mortality Rates The UP-1984 Mortality Table was used for the valuation.

Termination Rates. Termination rates based on the recent experience of the system were used. The following termination rates that were used:

	Rate of
Age	Termination
20 - 54	.080
55 and over	.000

Disability Rates. Disability rates based on the recent experience of the system as well as on published disability rate tables were used. The following is a sample of the disability rates that were used for the valuation:

Age	Rate of <u>Disability</u>
30	.00057
35	.00064
40	.00083
45	.00115
50	.00170

Retirement Rates. Rates of retirement for each age from 55 to 70 based on the recent experience of the system were used. The following are samples of the rates of retirement that were used:

	Rate of
Age	Retirement
55	•2
60	•1
65	•1
70	1.0

The above retirement rates are equivalent to an average retirement age of approximately 62.

Salary Increase. A salary increase assumption of 6.0% per year, compounded annually, was used.

Interest Rate. An interest rate assumption of 7.5% per year, compounded annually, was used.

Marital Status. It was assumed that 75% of active members will be married at the time of retirement.

Spouse's Age. The age of the spouse was assumed to be 4 years younger than the age of the employee.

Impact of Changes in Actuarial Assumptions. For the June 30, 1987 actuarial valuation, a number of changes in actuarial assumptions were made from those used for for the June 30, 1986 actuarial valuation. The most significant changes were an increase in the interest rate assumption from 6.0% to 7.5% and an increase in the salary increase assumption from 5.0% to 6.0%. We have estimated that the combined effect of the change in the interest rate and salary increase assumptions was to decrease the system's total actuarial liability by \$9,680,419.

Actuarial Cost Method

The projected unit credit actuarial cost method was used for the June 30, 1987 valuation. For the June 30, 1986 valuation, the entry age normal actuarial cost method was used. We have estimated that the effect of the change from the entry age normal actuarial cost method to the projected unit credit actuarial cost method was to decrease the system's total actuarial liability by \$1,160,479.

E. ACTUARIAL LIABILITY

The actuarial liability as determined under the valuation for the various classes of members is summarized in Exhibit 3. The total actuarial liability is then compared with the actuarial value of assets in order to arrive at the unfunded actuarial liability.

As of June 30, 1987, the total actuarial liability is \$60,635,325, the actuarial value of assets is \$31,174,446, and the unfunded actuarial liability is \$29,460,879. The ratio of the actuarial value of assets to the actuarial liability, or funded ratio, is 51.4%.

Exhibit 3

Actuarial Liability As Of June 30, 1987

1. Actuarial Liability For Active Members

(a) Basic retirement annuity	\$	9,877,642
(b) Annual increase in retirement annuity	•	1,742,927
(c) Pre-retirement survivor's annuity		957,224
(d) Post-retirement survivor's annuity		2,010,334
(e) Withdrawal benefits		4,408,418
(f) Disability benefits		135,495
(g) Total	\$	19,132,040

2. Actuarial Liability For Members Receiving Benefits

	(a) Retirement annuities(b) Survivor annuties(c) Total	\$ 33,561,514 <u>3,111,957</u> \$ 36,673,471
3.	Actuarial Liability For Inactive Members	4,829,814
4.	Total Actuarial Liability	\$ 60,635,325
5.	Actuarial Value of Assets	\$ 31,174,446
6.	Unfunded Actuarial Liability	\$ 29,460,879
7.	Funded Ratio	51.4%

F. Employer's Normal Cost

The employer's share of the normal cost for the year beginning July 1, 1987 is developed in Exhibit 4. For the year beginning July 1, 1987, the total normal cost is determined to be \$1,905,977, employee contributions are estimated to be \$764,027, resulting in the employer's share of the normal cost of \$1,141,950.

Based on a payroll of 6,643,710, the employer's share of the normal cost can be expressed as 17.19% of payroll.

Exhibit 4

Employer's Normal Cost For Year Beginning July 1, 1987

					Per Cent
		Doll	ar	Amount	Of Payroll
1.	Basic retirement annuity	\$	87	79,130	13.23%
2.	Annual increase in retirement annuity		15	57,507	2.37
3.	Pre-retirement survivor's annuity		10	02,512	1.54
4.	Post-retirement survivor's annuity		17	72,928	2.60
5.	Withdrawal benefits		48	34,471	7.30
6.	Disability benefits]	13,773	.21
7.	Administrative expenses		9	95,656	1.44
8.	Total normal cost	\$ 1	, 90	5,977	28.69%
9.	Employee contributions		76	64,027	11.50%
10.	Employer's share of normal cost	\$ 1	,14	41,950	17.19%

Note. The above figures are based on a total active payroll of \$6,643,710 as of June 30, 1987.

G. EMPLOYER'S FUNDING REQUIREMENT FOR YEAR BEGINNING JULY 1, 1987

I. Employer's Actuarial Funding Requirement Of Normal Cost Plus Interest On The Unfunded Liability

A number of organizations that have in the past advocated actuarial funding for public retirement systems have recommended that as a minimum, public employers contribute annually an amount equal to "normal cost plus interest on the unfunded liability". By paying the normal cost each year, the accruing cost of pensions is met as service is rendered by employees. By paying interest on the unfunded actuarial liability, the unfunded actuarial liability is stabilized. Although no attempt is made to pay off the unfunded actuarial liability, this approach is nevertheless considered acceptable for public retirement systems where permanence can be taken for granted and full funding is not regarded as essential.

The employer's funding requirement of normal cost plus interest on the unfunded liability for the year beginning July 1, 1987 is developed in Exhibit 5.

It can be seen from Exhibit 5 that for the year beginning July 1, 1987, the employer funding requirement of normal cost plus interest on the unfunded actuarial liability amounts to \$3,273,090. Total state appropriations for the year are estimated to amount to \$1,970,000. Thus, employer contributions for the year are expected to fall short of the employer funding requirement by \$1,303,090. This deficiency in employer contributions can be expressed as 19.61% of payroll.

Exhibit 5

Funding Requirement For Year Beginning July 1, 1987

1.	Employer's share of normal cost	\$ 1,141,950
2.	Interest on the unfunded actuarial liability	2,131,140
3.	Employer's funding requirement of normal cost	
	plus interest on the unfunded actuarial liability	\$ 3,273,090
4.	Estimated employer contribution for the year	1,970,000
5.	Estimate of amount by which employer contributions	
	are expected to fall short of the funding requirement	
	of normal cost plus interest on the unfunded liability	\$ 1,303,090

II. Employer's Actuarial Funding Requirement Of Normal Cost Plus Amount Required To Pay Off Unfunded Liability Over 40 Years As A Level Percent Of Payroll

Paying interest on the unfunded liability is one approach for controlling a retirement system's unfunded liability. There is an alternative to this approach under which contributions toward the unfunded liability are initially somewhat lower but which in the long run can still be considered to be a fiscally sound approach for funding public retirement systems. Under this alternative approach, the unfunded liability is amortized by payments which represent a level percentage of active membership payroll. This is sometimes referred to as the level percentage of payroll amortization approach.

Since the active payroll can be expected to increase over time, the level percentage of payroll amortization approach will require a lower contribution toward the unfunded liability in the earlier years than the "interest only" approach and will require greater contributions in the later years. However, the contribution as a percentage of payroll is expected to remain level over time.

In the early years, the level percentage of payroll payment toward the unfunded liability is less than an amount equal to interest on the unfunded liability, resulting in increases in the unfunded liability for a period of time. Eventually the payroll base will increase to a point where the level percentage of payroll approach should pay off the unfunded liability over the amortization period. A potential risk associated with this approach is that payroll increases are assumed that may not materialize. Nevertheless, the level percentage of payroll amortization approach can represent a fiscally sound approach for funding public retirement systems.

The employer's funding requirement of normal cost plus the amount required to amortize the unfunded liability over 40 years as a level percent of payroll is developed in Exhibit 6.

It can be seen from Exhibit 6 that for the year beginning July 1, 1987, the employer funding requirement of normal cost plus the amount required to amortize the unfunded liability over 40 years as a level percent of payroll amounts to \$2,395,818. Actual employer contributions for the year are estimated to amount to \$1,970,000. Thus, employer contributions for the year

are expected to fall short of the employer funding requirement determined under this basis by \$425,818.

Exhibit 6

Funding Requirement For Year Beginning July 1, 1987

l.	Employer's share of normal cost	\$ 1,141,950
 3. 	Amount required to amortize the unfunded liability over 40 years as a level percent of payroll Employer's total funding requirement (1. + 2.)	1,253,868 \$ 2,395,818
4.	Estimated employer contribution for the year	1,970,000
٦.	Estimate of amount by which employer contributions are expected to fall short of funding requirement (3 4.)	\$ 425,818

H. STATE APPROPRIATION REQUIREMENTS FOR FISCAL YEAR BEGINNING JULY 1, 1988

The June 30, 1987 actuarial valuation is used to develop the actuarial funding requirements of the system for the year beginning July 1, 1987. For State budgeting purposes, it is necessary to make a projection of the system's actuarial funding requirement for the fiscal year beginning July 1, 1988. Under Section 22-1001 of the Illinois Pension Code, the retirement system is required to submit to the Illinois Economic and Fiscal Commission information regarding the amount required to meet the State's share of the normal cost plus interest on the unfunded liability for the fiscal year commencing July 1, 1988.

We have therefore made some projections to estimate the amount of State appropriations required to meet the system's actuarial funding requirements for the fiscal year commencing July 1, 1988. This has been done under both of the approaches for controlling the system's unfunded liability that were outlined in Section G.

Actuarial Funding Requirement	Required Amount of State Appropriations For FY 89
Normal Cost Plus Interest On The Unfunded Liability	\$3,386,687
Normal Cost Plus Amount Required To Amortize Unfunded Liability Over 40 Years As A Level Percent Of Payroll	\$2,483,852

Note. The above figures are based on a projected payroll of \$6,942,677 for the fiscal year commencing July 1, 1988.

I. Actuarial Present Value of Credited Projected Benefits

In November 1986, the Governmental Accounting Standards Board (GASB) issued Statement No. 5 entitled Disclosure of Pension Information by Public Employee

Retirement Systems and State and Local Governmental Employers. The statement established standards of disclosure of pension information by public employee retirement systems.

GASB Statement No. 5 requires the disclosure of the actuarial present value of credited projected benefits as the standardized measure of the accrued pension obligation. This measure represents the discounted value of the amount of benefits estimated to be payable in the future as a result of employee service to date, computed by attributing an equal benefit amount to each year of service of the employee.

It should be noted that the actuarial present value of credited projected benefits is equal to the actuarial liability computed under the projected unit credit actuarial cost method. Thus, since the projected unit credit actuarial cost method was used for the valuation, the total actuarial liability of \$60,635,325 as developed in Section E of this report is also the actuarial present value of credited projected benefits that is required to be disclosed under GASB Statement No. 5.

In Exhibit 7 we have shown the actuarial present value of credited projected benefits in the format prescribed in GASB Statement No. 5. It can be seen that the total actuarial present value of credited projected benefits of \$60,635,325 is the same as the total actuarial liability under the projected unit credit actuarial cost method.

Exhibit 7. Actuarial Present Value of Credited Projected Benefits

1.	For members in receipt of benefits and for inactive members	\$ 41,503,285
2.	For current employees Accumulated employee contributions Employer-financed vested Employer-financed nonvested	4,770,095 8,706,086 5,655,859
3.	Total actuarial present value of credited projected benefits	\$ 60,635,325
4.	Net assets available for benefits, at cost (Market value is \$31,834,540)	\$ 29,223,797
5.	Unfunded actuarial present value of credited projected benefits	\$ 31,411,528

J. CERTIFICATION

This actuarial report has been prepared in accordance with generally accepted actuarial principles and practices and to the best of my knowledge, fairly represents the financial condition of the General Assembly Retirement System of Illinois as of June 30, 1987.

Respectfully submitted

Garder Goldstein

Fellow of the Society of Actuaries

Enrolled Actuary No. 3402

APPENDIX

Summary of Provisions of the Act
Governing the General Assembly Retirement System

Retirement Estimate Chart

Statistical Tables

SUMMARY OF PROVISIONS OF THE GENERAL ASSEMBLY RETIREMENT SYSTEM

(Includes amendments enacted at the 1985 session of the 84th General Assembly. This summary should not be considered as a substitute for the applicable law)

Membership. Membership includes all members of the General Assembly and State officials of the executive branch who are elected by the vote of the people of the whole State of Illinois

1. PARTICIPATION AND CONTRIBUTIONS OF MEMBERS

Participation. A person eligible for membership must participate in the System as a condition of employment unless an "Election Not to Participate" is filed within 24 months from the date of assuming office.

Continued Participation. A member who has at least 6 years of service as a member of the General Assembly may, following termination of service in the General Assembly, elect to continue participation in the General Assembly Retirement System while employed in certain other positions of public service provided the salary is at least equal to the regular salary of members of the General Assembly. In such case contributions and benefits would be based on the regular salary applicable to members of the General Assembly in effect during such service. This election opportunity will expire December 31, 1991, and the allowance of such continued participation is limited to 4 years.

Contributions. Members must contribute for the following purposes, by payroll deductions, at the rates indicated:

Retirement Annuity Automatic Annuity Increase Survivor Annuity	8.5% 1.0 2.0
Total	11.5%

Member Contributions Not Subject to Federal or State Income Tax Until Distributed. Member contributions on earnings received after January 1, 1982 are picked up as employer contributions and, therefore, that amount of salary is not considered as taxable income for Federal or State Income Tax purposes in the year the compensation is received. However, these retirement contributions will be subject to Federal Income Tax when such amounts are distributed as a retirement annuity, survivor's annuity, lumpsum death benefit or refund.

Refund of Contributions. Upon termination of service a member is entitled to a refund of his total contributions without interest.

If unmarried at retirement, a member is entitled to a full refund of his contributions for survivor's annuity. However, this refund may be repaid, with required interest, to qualify a spouse for survivor's benefits if the member marries or remarries after retirement.

2. RETIREMENT ANNUITY

Formula. The retirement annuity is determined according to the following formula based upon the final rate of salary:

3.0% for each of the 1st 4 years of service credit;

3.5% for each of the next 2 years of service credit;

4.0% for each of the next 2 years of service credit;

4.5% for each of the next 4 years of service credit;

5.0% for each year of service in excess of 12 years; Maximum is 85% of salary after 20 years of credit.

SEE ESTIMATE CHART ON FOLLOWING PAGE.

Age and Service Requirements for Retirement. A member may retire at age 55 or over with at least 8 years of service credit or at age 62 or over with between 4 and 8 years of service credit.

Total and Permanent Disability. A participant with at least 8 years of credited service who becomes disabled while in service as a contributing member is eligible for a retirement annuity regardless of age.

If disability is service-connected, the annuity is subject to reduction by the amounts received under the Workmen's Compensation Act and the Workmen's Occupational Diseases Act.

Automatic Annuity Increase. An annuitant is eligible for an annual increase of 3% in the base retirement annuity but not prior to age 60. Each annual increase is based upon the original grant of annuity. The initial increase is effective in the month of January of the year next following the year in which the first anniversary of retirement occurs or at age 60, whichever last occurs.

Suspension of Retirement Annuity. An annuitant who reenters service becomes a participant as of the date of reentry and retirement annuity payments cease. Upon subsequent retirement the member shall be entitled to a retirement annuity consisting of (1) the amount of retirement annuity previously granted, and (2) the amount of additional retirement annuity earned by the additional service, subject to the prescribed maximum.

In lieu of the above, such a member may elect to return to the System, in a single sum, all pension payments made to him prior to subsequent retirement and have his retirement annuity recalculated based on all service credited to him as though he had not previously retired.

If the provisions of the Retirement Systems' Reciprocal Act are elected at retirement, any employment which would result in the suspension of benefits from any of the systems being considered would also cause the benefit being paid by the General Assembly Retirement System to be suspended.

ESTIMATE CHART

GENERAL ASSEMBLY RETIREMENT SYSTEM OF ILLINOIS

The following table shows the approximate retirement annuity benefit with the corresponding spouse's annuity with between 8 and 20 years of service credit which is applicable to members terminating service after July 1, 1987, and based on a final annual salary of \$35,661.

RETIREMENT ANNUITY			SPOUSE'S ANNUITY (Note 2)	
Years of Service	Percent of Salary	Monthly Amount at Age 55 or Over	Monthly Amount	
4 (Note 1)				
8	27%	\$ 802	\$ 534	
10	36%	1,069	712	
12	45%	1,337	891	
14	55%	1,634	1,089	
16	65%	1,931	1,287	
18	75%	2,228	1,485	
20 and over	85%	2,525	1,683	

Note 1. A member terminating service with at least 4 years of credit but less than 8 is eligible to a pension at age 62 or over: 12% for 4 years: \$356 month 19% for 6 years: \$564 month

Note 2. Payable at age 50 of the spouse if no children survive.

If an unmarried minor child under age 18 also survives the member, the annuity to the spouse begins as of the date of the member's death without regard to age and the annuity is increased.

3. SURVIVORS ANNUITY BENEFITS

Optional Reversionary Annuity. Any member may, prior to his retirement, elect to take a reduced annuity for himself and provide, on an actuarially equated basis, an annuity for a spouse, parent, child, or a brother or sister. A participant desiring to provide such a benefit should file his election with the System at least two years prior to his contemplated date of retirement.

Survivors Annuity - Qualifying Conditions. A surviving spouse without children may be considered for this benefit at age 50 or over provided marriage to the member had been in effect for at least 1 year immediately prior to the member's death.

A surviving spouse with unmarried eligible children of the member may be considered for a survivors annuity benefit at any age provided the marriage requirements forementioned have been met. When all children are disqualified because of death, marriage or attainment of age 18, the spouse's benefit is suspended, if the spouse is under age 50, until attainment of such age.

Remarriage prior to attainment of age 55 shall disqualify a surviving spouse for the receipt of an annuity.

An unmarried child of the member under age 18 may qualify for the survivors benefit if there is no surviving spouse or if the spouse remarries prior to attainment of age 55 or dies. Adopted children have the same status as children of the member if the preceedings for adoption were commenced at least one year prior to the date of the member's death.

Service Requirement. If the member dies while in service as a participant, he must have at least two years of service credit for the survivor's annuity eligibliity. If death occurs after termination of service but before retirement, the deceased member must have at least 8 years of service credit.

Amount of Survivor's Annuity. The benefits payable to survivors in the several categories, provided qualifying provisions and other requirements have been fulfilled, are as follows:

•		DEATH IN SERVICE	DEATH AFTER TERMINATION OR RETIREMENT
(a)	Spouse without eligible children of the member	66-2/3% of earned retirement annuity subject to minimum of 10% of salary	66-2/3% of earned retirement annuity
(b)	Spouse with eligible children of the member	30% of salary increased 10% of salary on account of each minor child subject to a maximum of 50% of salary to a family	

Amount of Survivor's Annuity. (Cont'd.)

DEATH AFTER TERMINATION DEATH IN SERVICE OR RETIREMENT 20% of salary each child (c) Children of the 20% of salary each subject to combined total child subject to a member under age payment equal to 75% of 18 when there is combined total payment of 50% of member's earned retirement no eligible spouse salary. annuity.

Offset by Workmen's Compensation. The survivor's annuity is subject to reduction by any amounts received by a survivor under the Workmen's Compensation Act or the Workmen's Occupational Diseases Act.

4. LUMP SUM DEATH BENEFITS

Lump sum death benefits are considered only if there are no eligible

"survivor's annuity" beneficiaries surviving the deceased member.		
	Conditions for Payment	Benefits Payable
(a)	Death before retirement with no survivors eligible to a survivor's annuity	Refund of total contribution credits to nominated beneficiary or estate.
(b)	Death after retirement with no survivors eligible to a survivor's annuity	Refund of excess of (a) contri- butions over, (b) pension pay- ments. Payable to nominated beneficiary or estate. If total benefits paid equal or exceed contributions, no death benefit is payable.
(¢)	Death of survivor annuitant with no further survivor's annuity payable	Refund of excess of (a) contributions over, (b) total retirement and survivors payments. Payable to nominated beneficiary or estate of last survivor. If total benefits equal or exceed contributions, no death benefit is payable.

5. PENSION CREDITS ESTABLISHED IN OTHER PUBLIC EMPLOYEE RETIREMENT SYSTEMS IN ILLINOIS

Pension credit for service transferred from other retirement systems.

Pension credit for service as a participating employee under Articles 3 through 18 of the Illinois Pension Code may be transferred to the General Assembly Retirement System at the option of a member and subject to the following conditions:

- That the credits accrued under any of the articles forementioned have been transferred to this System, and
- 2. That the member has contributed to this System an amount equal to (a) employee contributions at the rate in effect for participants at the date of membership in this System based upon the salary then in effect for members of the General Assembly, (b) the funded cost for the State of Illinois, in effect at such date, and (c) interest at 6% per annum, compounded annually, from the date of membership to the date of payment by the member; less the amount of participant's credits transferred from the other system.

The direct transfer of credits to this system from another system must be made while the member is an active participant of the General Assembly Retirement System.

6. RECIPROCITY

The Retirement Systems' Reciprocal Act (Chapter 108½, Article 20, Illinois Revised Statutes) provides the means for giving effect to pension credits in certain other public retirement systems in Illinois by considering such credits with credits in the General Assembly Retirement System for the purpose of determining eligibility to benefits and for computing the benefits that may be payable to participants and their dependents.

Under the "Retirement Systems' Reciprocal Act", each retirement system considers the provisions of its law in effect on the last date of last termination of service of the member under any of the systems involved. Earnings under all systems are considered by each system in establishing the salary base on which benefits are to be computed. Public employment is considered in sequence by each system in arriving at the proper graded percentage rate of annuity applicable to the member under its graduated annuity formula. Each system is to pay its proportionate annuity to the annuitant but the total payments by all systems cannot exceed the highest maximum annuity of any of the systems being considered if all of the member's public employment had been credited in that system. No additional contributions are required for this provision to be applicable.

7. TAXATION OF BENEFITS

Retirement and survivor's annuity benefits paid by the System are subject to Federal Income Tax. The Tax Reform Act of 1986 made several changes in the tax treatment of pension payments. The three-year recovery rule was eliminated for any individual whose benefit commences after July 1, 1986, and a portion of the monthly annuity may be excluded as income for tax purposes with the balance considered as taxable income beginning with the first payment. The nontaxable amount of the benefit is determined from the member's tax free cost and the expected return based on the life expectancy of the pensioner at the beginning date of the benefit. Under the General Assembly Retirement System the member's cost would normally represent contributions prior to January 1, 1982. When benefits become payable, the member or survivor will be provided with information regarding the Federal Income Tax treatment of the benefit and the amount the recipient is to consider as the cost of annuity.

Benefits paid by the General Assembly Retirement System are not subject to Illinois State Income Tax.

8. STATE EMPLOYEES GROUP INSURANCE PROGRAM

A former member receiving benefits from the System is eligible to coverage under the State Group Insurance Program. Basic health premiums for the annuitant are paid by the State and premiums for any dependent health coverage are deducted from the monthly benefit. The maximum State-paid basic life insurance coverage is \$2,000 for an annuitant at age 60 or over.

A member who begins to receive retirement benefits within one year of the date of removal from the payroll is considered an "immediate annuitant" and one who begins to receive retirement benefits after being off the payroll for more than one year is considered a "deferred annuitant" for group insurance purposes.

An "immediate annuitant" has basic life insurance coverage and may elect optional life coverage for self in multiples of up to four times the basic amount. Life coverage may also be elected for a spouse and eligible children. The State pays the premium for basic life but premiums for any optional life coverage are paid by the member by way of a deduction from the monthly benefit.

A "deferred annuitant" has basic life coverage with premiums State paid but is not eligible to elect any optional life coverage either for self or dependents.

A survivor who qualifies for monthly benefits upon the death of an active or retired member then becomes the annuitant and premiums for that survivor's basic health insurance coverage are paid by the State. A survivor annuitant of a deceased active member or "immediate annuitant" may elect \$2,000 life insurance with premiums deducted from the monthly benefit.

A member who has at least 4 years of credit in this system but not yet eligible for retirement may have coverage under the State Group Insurance Program as long as membership in this system is not terminated by the acceptance of a refund. In such case the member would be required to pay for the entire cost of the coverage including premiums normally paid by the State. This special enrollment would be handled by the General Assembly Retirement System with premiums for the coverage remitted through this office.

STATISTICAL TABLES

TABLE 1. ACTIVE PARTICIPANTS CLASSIFIED BY AGE AND TOTAL ANNUAL SALARIES

Age At June 30, 1987	Number of Partici- pants	Annual Salaries	Age at June 30, 1987	Number of Partici- pants	Annual Salaries
31	1	\$ 33,962	50	8	\$ 292,596
32	1	33 ,9 62	51	8	282,146
33	2	67,924	52	7	250,274
34	3	101,886	53	3	112,336
		•	54	7	244,004
35	5	169,810			•
36	3	101,886	55	5	176,080
37	3	101,886	56	6	225,300
38	3	101,886	57	7	248,184
39	7	237,734	58	2	67,924
		•	59	3	101,886
40	10	358,430			
41	8	294,686	60	1	40,232
42	9	305,658	61	4	142,118
43	9	310,466	62	7	242,542
44	5	177,648	63	3	119,234
			64	6	203,772
45	8	298,866	•	•	,
46	7	242,542	65	3	108,156
47	3	101,886	66	i	40,232
48	2	67,924	67	2	67,924
49	7	252,992	68	2	67,924
			69	1	38,770
			70	1	33,962
			71	1	33,962
			72	1	33,962
			73	2	74,194
			74	_1	33,962
			Totals	188	\$6,643,710

TABLE 2. ACTIVE PARTICIPANTS CLASSIFIED BY LENGTH OF SERVICE AND TOTAL ANNUAL SALARIES

Length of Service June 30, 1987 Number of Years	Number of Participants	Annual Salaries
2 or less	38	\$1,290,556
4	33	1,152,724
6	20	689,690
8	22	774,962
10	18	642,144
12	18	650,192
14	12	418,622
16	9	332,828
18	7	256,544
20 or over	11	435,448
Totals	188	\$6,643,710

TABLE 3. INACTIVE PARTICIPANTS CLASSIFIED BY AGE AND TOTAL ANNUAL SALARIES

Age at June 30, 1987	Number	Annual Salaries
30	1	\$ 33,962
38 39	4	112,000 32,500
40	1	38,500
41	1	28,000
42	2	56,000
43	3	99,000
44	3	88,500
45	7	194,000
46	4	122,462
47	3	80,500
48	3	80,500
49	3	86,000
50	2	56,000
51	3	80,500
52	7	190,500
53	3	65,000
54 55	4	56,000 95,500
56	2	41,462
57	2	45,500
58	4	101,500
59	1	5,000
60	5	91,500
61	1	28,000
62	1	7,500
63	3	51,500
64 65	2	7,500 35,500
66	1	20,000
67	1	5,000
69	1	17,500
71	1	9,000
72	1	6,000
74	1	6,000
88	1	5,000
Totals	86	\$2,078,886

TABLE 4. INACTIVE PARTICIPANTS CLASSIFIED BY LENGTH OF SERVICE AND TOTAL ANNUAL SALARIES

Length of Service June 30, 1987 Number of Years	Number	Annual Salaries
2	15	\$ 341,462
4	14	345,962
6	12	244,500
8	16	336,000
10	10	284,500
12	7	181,500
14	7	180,000
16	4	136,962
18	1	28,000
Totals	86	\$2,078,886
	-	

TABLE 5. RETIREMENT ANNUITANTS CLASSIFIED BY AGE AND TOTAL ANNUAL ANNUITIES

A		
Age At June 30, 1987	Number	Annual Annuity
54	1	\$ 27,625
55	2	79,551
56	9	172,552
57	5	84,949
58	4	63,804
59	7	157,045
60	4	54,459
61	8	75,715
62	9	142,032
63	11	163,128
64	9	108,268
65	12	189,102
66	10	223,069
67	6	88,460
68	8	125,559
69	5	91,791
70	7	75,851
71	11	183,236
72	8	145,745
73	7	53,850
74	5	97,078
75	9	113,515
76	5	71,524
77	4	68,300
78	9 4	97,435
79	4	54,302
80	4	34,122
81	5	67,949
82	4	31,640
84	1	6,790
85	1	19,200
86	3	31,217
87	2	12,745
89	2	5,032
90	2	22,045
91	1	1,200
92	1	1,701
93	1	19,360
		
Totals	206	\$3,060,946

TABLE 6. SURVIVOR ANNUITANTS CLASSIFIED BY AGE AND TOTAL ANNUAL ANNUITIES

Age At June 30, 1987	Number	Annual Annuity
38	1	\$ 13,000
55	1	6,593
56	2	20,700
57	2	13,681
58	1 2 2 2 3	26,214
59	3	18,913
60	2 3	18,860
61	3	2,468
62	4	18,214
63	3 2	29,806
64	2	25,301
66	4	39,373
67	4	24,185
68	5 7	17,095
69	7	32,660
70	1 2 3 1	8,750
71	2	1,323
72	3	11,607
73	1	1,250
74	5	32,635
75	3	16,715
76	6	10,000
77	5 9	34,996
78 		24,161
79	6	21,971
80	8	23,949
81	3	4,217
82	4	3,700
83	3 4 2 4	7,167
84	4	12,129
85	1	1,000
86	6	12,857
87	3	7,839
88	6 3 1 2	7,194
89	2	8,125
92	· 1	667
93	2	2,867

Totals	123	\$562,182